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10/553,192	10/13/2005	Masayuki Sakata	Q90259	2211
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# Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary		Applicat	ion No.	Applicant(s) SAKATA, MASAYUKI				
		10/553, <sup>2</sup>	192					
		Examine	er	Art Unit				
		MARCO	S BATISTA	2617				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply								
WHICI - Extens after S - If NO - Failure Any re	DRTENED STATUTORY PERIOD F HEVER IS LONGER, FROM THE N sions of time may be available under the provisions SIX (6) MONTHS from the mailing date of this comi- period for reply is specified above, the maximum s to reply within the set or extended period for reply toply received by the Office later than three months d patent term adjustment. See 37 CFR 1.704(b).	MAILING DATE OF T of 37 CFR 1.136(a). In no enunication. atutory period will apply and will, by statute, cause the ap	THIS COMMUNICATION IN THE COMM	ON. timely filed om the mailing date of this on NED (35 U.S.C. § 133).	·			
Status								
2a)⊠ 3)□	Responsive to communication(s) file This action is <b>FINAL</b> . Since this application is in condition closed in accordance with the pract	2b)⊡ This action is for allowance excep	non-final. ot for formal matters, p		e merits is			
Dispositio	on of Claims							
5)	Claim(s) <u>19-55</u> is/are pending in the la) Of the above claim(s) is/a Claim(s) is/a Claim(s) is/are allowed. Claim(s) <u>19-55</u> is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restricted.	re withdrawn from o						
10) □ 1	The specification is objected to by the Grawing(s) filed on is/are Applicant may not request that any objected to the part of the oath or declaration is objected to the specific part of the oath or declaration is objected to the specific part of the speci	: a) ☐ accepted or b ction to the drawing(s) the correction is requ	be held in abeyance. Sired if the drawing(s) is contact the drawing(s) is contact the second	see 37 CFR 1.85(a). Objected to. See 37 C				
Priority u	nder 35 U.S.C. § 119							
<ul> <li>12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).</li> <li>a) All b) Some * c) None of:</li> <li>1. Certified copies of the priority documents have been received.</li> <li>2. Certified copies of the priority documents have been received in Application No</li> <li>3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).</li> <li>* See the attached detailed Office action for a list of the certified copies not received.</li> </ul>								
2) Notice 3) Inform	(s) e of References Cited (PTO-892) e of Draftsperson's Patent Drawing Review (I lation Disclosure Statement(s) (PTO/SB/08) No(s)/Mail Date	PTO-948)	4) Interview Summa Paper No(s)/Mail 5) Notice of Informa 6) Other:					

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#### **DETAILED ACTION**

#### **Art Unit-Location**

- 1. The Art Unit location of your application in the USPTO has changed. To aid in correlating any papers for this application, all further correspondence regarding this application should be directed to Art Unit 2617.
- 2. This Action is in response to Applicant's amendment filed on 10/01/2008. Claims 19-55 are still pending in the present application. This Action is made **FINAL.**

### **Response to Argument**

3. Applicant's arguments with respect to claims 19-22, 26-29, 33, 35 and 51-55 have been considered but are moot in view of the new ground(s) of rejection.

# Claim Rejections - 35 USC § 103

- 4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
  - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 5. Claims 19-55 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohlsson et al. (US 20020068571 A1), hereafter "Ohlsson," in view of Fiter et al. (WO 02128130 A2), hereafter "Fiter."

The International Application (WO 02128130 A2) to Fiter was filed in German, however, examiner is relying on application (US 20040053627 A1), available in English, to make this rejection.

Consider claim 19, Ohlsson discloses a mobile communication system, comprising: a mobile terminal unit (30);a radio base station (28) which communicates with said mobile terminal unit via a radio channel (see fig. 6, par. 0089 lines 1-6); and a radio base station replacement control apparatus which controls replacement of said radio base station (see fig. 1A #100, fig. 3, pars. 0041 lines 5-11, 0062 lines 4-11 – The handover unit 100 controls the replacement of base station as mobile station 30 moves from C1 to C2).

Ohlsson however, does not particular refer a radio controller which controls said radio base station and is physically separated into control plane equipment for controlling transfer of signaling and user plane equipment for controlling transfer of user data; wherein the mobile terminal is handed over from the radio base station to another radio base station, controlled by a drift radio controller, without establishing a path between the radio controller and the drift radio controller.

Fiter, in analogous art, teaches a radio controller which controls said radio base station and is physically separated into control plane equipment for controlling transfer of signaling and user plane equipment for controlling transfer of user data (see figs. 1 and 2, page 6 lines 31-35, page 7 lines 1-35 - The user and control plane are administrated by two different servers; i.e., UPS and RCS); wherein the mobile terminal is handed over from the radio base station to another radio base station, controlled by a

drift radio controller, without establishing a path between the radio controller and the drift radio controller (see fig. 2, page. 10 lines 4-31 - Fiter talks about a mobile terminal moving from a subarea to another subarea without exchanging signaling information with second node; i.e., radio controller servers).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Ohlsson and have it include a radio controller which controls said radio base station and is physically separated into control plane equipment for controlling transfer of signaling and user plane equipment for controlling transfer of user data; wherein the mobile terminal is handed over from the radio base station to another radio base station, controlled by a drift radio controller, without establishing a path between the radio controller and the drift radio controller, as taught by Fiter. The motivation would have been in order to allow signaling and user data to be administrated from two different servers, which provide a high level of manageability and network control (see fig. 2, page 7 lines 1-35, page 10 lines 4-31).

Consider claim 20, Ohlsson discloses a mobile communication system, comprising: a mobile terminal unit (30);a radio base station (28) which communicates with said mobile terminal unit via a radio channel (see fig. 6, par. 0089 lines 1-6); and a radio base station replacement control apparatus which controls replacement of said radio base station (see fig. 1A #100, fig. 3, pars. 0041 lines 5-11, 0062 lines 4-11 – The handover unit 100 controls the replacement of base station as mobile station 30 moves from C1 to C2).

Ohlsson however, does not particular refer a radio controller which controls said radio base station and is physically separated into control plane equipment for performing control independent of a radio transmission scheme and user plane equipment for performing control depending on a radio transmission scheme; wherein the control plane equipment and the user plane equipment are adapted to be connected across a network.

Fiter, in analogous art, teaches a radio controller which controls said radio base station and is physically separated into control plane equipment for performing control independent of a radio transmission scheme and user plane equipment for performing control depending on a radio transmission scheme (see figs. 1 and 2, page 6 lines 31-35, page 7 lines 1-35 - The user and control plane are administrated by two different servers; i.e., UPS and RCS); wherein the control plane equipment and the user plane equipment are adapted to be connected across a network (see fig. 2, page. 10 lines 16-31).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Ohlsson and have it include a radio controller which controls said radio base station and is physically separated into control plane equipment for performing control independent of a radio transmission scheme and user plane equipment for performing control depending on a radio transmission scheme; wherein the control plane equipment and the user plane equipment are adapted to be connected across a network, as taught by Fiter. The motivation would have been in order to allow signaling and user data to be administrated from two

different servers, which provide a high level of manageability and network control (see fig. 2, page 7 lines 1-35, page 10 lines 4-31).

Consider claims 21, this claim discusses the same subject matter as claim 20. Therefore, it has been analyzed and rejected based upon the rejection to claim 20.

Consider claims 22, this claim discusses the same subject matter as claim 20. Therefore, it has been analyzed and rejected based upon the rejection to claim 20. In addition, Fiter also teaches wherein the user plane equipment is incorporated into the radio base station (see page 9 lines 1-6). The motivation would have been in order to allow signaling and user data to be administrated from two different servers, which provide a high level of manageability and network control (see fig. 2, page 7 lines 1-35, page 10 lines 4-31).

Consider claim 23, Ohlsson as modified by Fiter teaches claim 19, Fiter also teaches a mobile communication system according to claim 19, further comprising a network, wherein said control plane equipment and said user plane equipment are connected across the network (see fig. 2, page 10 lines 4-31). The motivation would have been in order to allow signaling and user data to be administrated from two different servers, which provide a high level of manageability and network control (see fig. 2, page 7 lines 1-35, page 10 lines 4-31).

Consider claim 24, Ohlsson as modified by Fiter teaches claim 23, Ohlsson also teaches wherein said radio base station replacement control apparatus comprises means for notifying, in response to an external trigger, a radio base station as an object of replacement of identification information of user plane equipment which is to newly accommodate said radio base station (see par. 0045 lines 1-8).

Consider claim 25, Ohlsson as modified by Fiter teaches claim 23, Ohlsson also teaches wherein said radio base station replacement control apparatus further comprises means for notifying said control plane equipment of identification information of said radio base station as an object of replacement and identification information of said user plane equipment as an accommodation destination (see par. 0045 lines 1-8).

Consider claim 26, this claim discusses the same subject matter as claim 19. Therefore, it has been analyzed and rejected based upon the rejection to claim 19. In addition, Fiter also teaches a database search unit for searching a database for storing information regarding radio base stations being controlled by a plurality of radio controllers (see page. 8 lines 1-10 – Fiter talks about a User Allocation Function that administer the network resources by the radio controller). The motivation would have been in order to keep track of available resources in the network (see page. 8 lines 1-10).

Consider claims 27, this claim discusses the same subject matter as claim 26.

Therefore, it has been analyzed and rejected based upon the rejection to claim 26.

Consider claims 28, this claim discusses the same subject matter as claim 26. Therefore, it has been analyzed and rejected based upon the rejection to claim 26.

Consider claims 29, this claim discusses the same subject matter as claim 26.

Therefore, it has been analyzed and rejected based upon the rejection to claim 26.

Consider claim 30, Ohlsson as modified by Fiter teaches claim 26, Fiter also teaches wherein said control plane equipment and user plane equipment are connected across a network (see fig. 2, page. 10 lines 16-31). The motivation would have been in order to allow signaling and user data to be administrated from two different servers, which provide a high level of manageability and network control (see fig. 2, page 7 lines 1-35, page 10 lines 4-31).

Consider claim 31, Ohlsson as modified by Fiter teaches claim 26, Ohlsson also teaches further comprising means for notifying, in response to an external trigger, a radio base station as an object of replacement of identification information of user plane equipment which is to newly accommodate said radio base station (see par. 0045 lines 1-8).

Consider claim 32, Ohlsson as modified by Fiter teaches claim 26, Ohlsson also teaches further comprising means for notifying said control plane equipment of identification information of said radio base station as an object of replacement and

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identification information of said user plane equipment as an accommodation destination(see par. 0045 lines 1-8).

Consider claim 33, Ohlsson discloses a radio base station replacement control method in a communication system, the communication system including a mobile terminal unit (30), a radio base station which communicates with the mobile terminal unit via a radio channel (see fig. 6, par. 0089 lines 1-6), notifying, in response to an external trigger, a radio base station as an object of replacement of identification information of the user plane equipment which is to newly accommodate the radio base station (see par. 0045 lines 1-8).

Ohlsson, however, does not particular refer to a radio base station replacement control apparatus which is provided physically separated into control plane equipment and user plane equipment for accommodating the radio base station under the control and controlling transfer of user data, a radio base station replacement control apparatus which is provided physically independent of the control plane equipment and user plane equipment and controls replacement of the radio base station with other radio base stations being controlled by the radio controller or by other radio controllers.

Fiter, in analogous art, teaches to a radio control which is provided physically separated into control plane equipment and user plane equipment for accommodating the radio base station under the control and controlling transfer of user data (see figs. 1 and 2, page 6 lines 31-35, page 7 lines 1-35 - The user and control plane are

administrated by two different servers; i.e., UPS and RCS), a radio base station replacement control apparatus which is provided physically independent of the control plane equipment and user plane equipment and controls replacement of the radio base station with other radio base stations being controlled by the radio controller or by other radio controllers (see fig. 2, page. 1-10 – Fiter talks about a User Allocation Function, which allocation network resources and it separated from the control and user plane).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the invention of Ohlsson and have it include a control which is provided physically separated into control plane equipment and user plane equipment for accommodating the radio base station under the control and controlling transfer of user data, a radio base station replacement control apparatus which is provided physically independent of the control plane equipment and user plane equipment and controls replacement of the radio base station with other radio base stations being controlled by the radio controller or by other radio controllers, as taught by Fiter. The motivation would have been in order to allow signaling and user data to be administrated from two different servers, which provide a high level of manageability and network control (see fig. 2, page 7 lines 1-35, page 10 lines 4-31).

Consider claim 34 Ohlsson as modified by Fiter teaches claim 33 Ohlsson also teaches further comprising the step of notifying the control plane equipment of identification information of the radio base station as an object of replacement and

identification information of the user plane equipment as an accommodation destination (see par. 0045 lines 1-8).

Consider claim 35, this claim discusses the same subject matter as claim 33. Therefore, it has been analyzed and rejected based upon the rejection to claim 33.

Consider claim 36, this claim discusses the same subject matter as claim 25.

Therefore, it has been analyzed and rejected based upon the rejection to claim 25.

Consider claims 37, Ohlsson as modified by Fiter teaches claim 20, Fiter also teaches wherein the network which connects said control plane equipment, user plane equipment, and radio base station replacement control apparatus (see fig. 2, page. 10 lines 16-31). The motivation would have been in order to allow signaling and user data to be administrated from two different servers, which provide a high level of manageability and network control (see fig. 2, page 7 lines 1-35, page 10 lines 4-31).

Consider claim 38, this claim discusses the same subject matter as claim 37. Therefore, it has been analyzed and rejected based upon the rejection to claim 37.

Consider claim 39, this claim discusses the same subject matter as claim 37. Therefore, it has been analyzed and rejected based upon the rejection to claim 37.

Consider claim 40, Ohlsson as modified by Fiter teaches claim 20, Ohlsson also teaches wherein said radio base station replacement control apparatus comprises means for notifying, in response to an external trigger, a radio base station as an object of replacement of identification information of user plane equipment which is to newly accommodate said radio base station (see par. 0045 lines 1-8).

Consider claim 41, Ohlsson as modified by Fiter teaches claim 21, Ohlsson also teaches wherein said radio base station replacement control apparatus comprises means for notifying, in response to an external trigger, a radio base station as an object of replacement of identification information of user plane equipment which is to newly accommodate said radio base station (see par. 0045 lines 1-8).

Consider claim 42, Ohlsson as modified by Fiter teaches claim 22, Ohlsson also teaches wherein said radio base station replacement control apparatus comprises means for notifying, in response to an external trigger, a radio base station as an object of replacement of identification information of user plane equipment which is to newly accommodate said radio base station (see par. 0045 lines 1-8).

Consider claim 43, Ohlsson as modified by Fiter teaches claim 23, Ohlsson also teaches wherein said radio base station replacement control apparatus comprises means for notifying, in response to an external trigger, a radio base station as an object

of replacement of identification information of user control equipment which is to newly accommodate said radio base station (see par. 0045 lines 1-8).

Consider claim 44, Ohlsson as modified by Fiter teaches claim 27, Fiter also teaches wherein said control plane equipment and user control plane equipment are connected across a network (see fig. 2, page. 10 lines 16-31). The motivation would have been in order to allow signaling and user data to be administrated from two different servers, which provide a high level of manageability and network control (see fig. 2, page 7 lines 1-35, page 10 lines 4-31).

Consider claim 45, this claim discusses the same subject matter as claim 44.

Therefore, it has been analyzed and rejected based upon the rejection to claim 44.

Consider claim 46, this claim discusses the same subject matter as claim 44.

Therefore, it has been analyzed and rejected based upon the rejection to claim 44.

Consider claim 47, this claim discusses the same subject matter as claim 43. Therefore, it has been analyzed and rejected based upon the rejection to claim 43.

Consider claim 48, this claim discusses the same subject matter as claim 43. Therefore, it has been analyzed and rejected based upon the rejection to claim 43.

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Consider claim 49, this claim discusses the same subject matter as claim 43. Therefore, it has been analyzed and rejected based upon the rejection to claim 43.

Consider claim 50, this claim discusses the same subject matter as claim 43. Therefore, it has been analyzed and rejected based upon the rejection to claim 43.

## Claim Rejections - 35 USC § 102

7. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 8. Claims 51-55 are rejected under 35 U.S.C. 102(b) as being anticipated by Fiter et al. (WO 02128130 A2), hereafter "Fiter."

Consider claim 51, Fiter discloses a system comprising (see fig. 2): means for communicating between a radio base station and a mobile terminal unit via a radio channel (see page 6 lines 31-36, page 7 lines 1-6); means for controlling the radio base station and physically separated into first control means for controlling transfer of signaling and second control means for controlling transfer of user data (see figs. 1 and 2, page 6 lines 31-35, page 7 lines 1-35 - The user and control plane are administrated by two different servers; i.e., UPS and RCS); and means for controlling replacement of the radio base station by another radio base station (see fig. 2, page 8 lines 1-10 - Fiter talks about a User Allocation Function Unit that administers the

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network resources when a terminal moves from one subarea to another subarea), wherein the mobile terminal is handed over from the radio base station to the other radio base station by a means for drift radio controlling, without establishing a path between the means for controlling the radio base station and the means for drift radio controlling (see fig. 2, page. 10 lines 4-31 - Fiter talks about a mobile terminal moving from a subarea to another subarea without exchanging signaling information with second node; i.e., radio controller server).

Consider claim 52, Fiter discloses a mobile communication system (see fig. 1) comprising a radio controller which controls a radio base station in communication with a mobile terminal unit via a radio channel (see page 6 lines 31-36, page 7 lines 1-6), the radio controller being physically separated into control plane equipment for controlling transfer of signaling and user plane equipment for controlling transfer of user data (see figs. 1 and 2, page 6 lines 31-35, page 7 lines 1-35 - The user and control plane are administrated by two different servers; i.e., UPS and RCS), wherein the mobile terminal is handed over from one radio base station to another radio base station, controlled by a drift radio controller, without establishing a path between the radio controller and the drift radio controller (see fig. 2, page. 10 lines 4-31 - Fiter talks about a mobile terminal moving from a subarea to another subarea without exchanging signaling information with second node; i.e., radio controller server).

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Consider claim 53, Fiter discloses a mobile communication system (see fig. 1), comprising: a radio controller which controls a radio base station in communication with a mobile terminal unit via a radio channel (see page 6 lines 31-36, page 7 lines 1-6), the radio controller being physically separated into control plane equipment for performing control independent of a radio transmission scheme and user plane equipment for performing control depending on a radio transmission scheme (see figs. 1 and 2, page 6 lines 31-35, page 7 lines 1-35 - The user and control plane are administrated by two different servers; i.e., UPS and RCS), wherein the control plane equipment and the user plane equipment are adapted to be connected across a network (see fig. 2, page. 10 lines 16-31).

Consider claim 54, Fiter discloses a mobile communication system (see fig. 1) comprising: a radio controller which controls a radio base station in communication with a mobile terminal unit via a radio channel (see page 6 lines 31-36, page 7 lines 1-6), the radio controller being physically separated into control plane equipment for controlling transfer of signaling and user plane equipment for controlling transfer of user data, said user plane equipment performing control depending on a radio transmission scheme (see figs. 1 and 2, page 6 lines 31-35, page 7 lines 1-35 - The user and control plane are administrated by two different servers; i.e., UPS and RCS); and a radio base station replacement control apparatus provided physically independently of the control plane equipment and the user plane equipment, the radio base station replacement control apparatus controlling replacement of said radio base station with

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other radio base stations being controlled by the radio controller or by other radio controllers (see fig. 2, page 8 lines 1-10 - Fiter talks about a User Allocation Function Unit that administers the network resources when a terminal moves from one subarea to another subarea).

Consider claim 55, Fiter discloses a mobile communication system (see fig. 1) comprising: a radio controller which controls a radio base station in communication with a mobile terminal unit via a radio channel (see page 6 lines 31-36, page 7 lines 1-6), the radio controller being physically separated into control plane equipment for controlling a terminal resource of said mobile terminal unit and user plane equipment for accommodating said radio base station and controlling a base station resource of said radio base station (see figs. 1 and 2, page 6 lines 31-35, page 7 lines 1-35 - The user and control plane are administrated by two different servers; i.e., UPS and RCS), wherein the user plane equipment is incorporated into the radio base station (see page 9 lines 1-6), wherein replacement of said radio base station in communication with the mobile terminal with another radio base station is controlled by a user data selector and synthesizer unit incorporated into the radio base station (see fig. 2, page 8 lines 1-10 - Fiter talks about a User Allocation Function Unit that administers the network resources when a terminal moves from one subarea to another subarea).

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#### Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Marcos Batista, whose telephone number is (571) 270-5209. The Examiner can normally be reached on Monday-Thursday from 8:00am to 5:00pm.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor, Rafael Pérez-Gutiérrez can be reached at (571) 272-7915. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free) or 703-305-3028.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist/customer service whose telephone number is (571) 272-2600.

Marcos Batista /M. B./ 12/12/2008